- a) classifying the various subgroups of the disease, said subgroups being classified based on pathology, pathogenic agent, cause or symptoms, on an n-bit data word stored in a memory;
- b) defining the clinical tests suitable for confirming the diagnosis of each of the subgroups classified in a);
- selecting to run only the clinical tests listed in b) for the sub-group showing an abnormality thereby excluding unnecessary clinical tests to be carried out in duplicate or not allowing an outside operator to run said unnecessary tests, and comparing the result obtained with the normal value provided on the n-bit data word;
- d) sequentially running the relevant clinical test of each of the sub-groups upon receiving a first of said clinical test values, and computing the next set of said clinical test for further testing, and
- e) repeating steps c) and d) until a complete diagnosis of the specific disease type and group is provided, thereby excluding unnecessary clinical tests and expensive duplicative procedures, while enabling an accurate diagnosis using the disease-specific diagnostic algorithm.

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21. (Thrice Amended) An apparatus for pipelining a diagnostic algorithm on an n-bit data word, said apparatus comprising:

- a) a memory storing component, said component used for storing the n-bit data words relevant to a set of m clinical tests;
- b) means for sequentially reading out each of a m clinical tests of the n-bit data from said memory such that only said clinical tests are run thereby excluding unnecessary duplication of tests or not allowing an outside operator to run said unnecessary tests, wherein m is an integer greater than one; and
- c) a processor for sequentially programming each of the m clinical tests to produce a complete diagnosis, and for outputting the result.

<u>REMARKS</u>

Claims 1-4 and 22, 23, and 24 are amended and under consideration.

Claim 22 is cancelled.

Claim 22 was rejected under 35 U.S.C. 112, second paragraph.

Applicant has amended claim 22 to particularly point out that the invention is cost effective and provides accurate diagnosis using only necessary tests.

Claim 22 is rejected to expedite the prosecution of this application.